AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

1.-8 (Canceled)

8. (New) A system, comprising:

a plurality of sensors, each sensor including a transmitter and a receiver for signals, wherein:

one of the sensors being able to receive a cross echo signal of another of the sensors,

each of the sensors one of receives and analyzes one of self-echo signals and cross echo signals only for specific intervals relating to a time delay of a reception signal in relation to a transmission signal of its own, and

a phase angle of the repetition frequency f_w of the transmission signal is selected differently for each sensor.

9. (New) The system as recited in Claim 8, wherein the sensors include one of communicating radar sensors, communicating optical sensors, and communicating ultrasound sensors.

10. (New) The radar system as recited in Claim 9, wherein a carrier signal modulated by a PN code using one of ASK, PSK, BPSK, FSK, and a combination of at least two of ASK, PSK, BPSK, and FSK is used for the transmission signals of the radar sensors.

11. (New) The radar system as recited in Claim 10, wherein each of the radar sensors monitors a distance range (r_a; $r_{b)}$ to be monitored from the interval (0m; $R_{max)}$ where: $0m \leq_a \leq_b \leq R_{max}$.

12. (New) The radar system as recited in Claim 11, wherein n radar sensors transmit simultaneously, without interruption, an appropriately modulated transmission signal.

13. (New) The radar system as recited in Claim 9, wherein a first radar sensor receives the cross echoes of n-1 additional communicating radar sensors in the distance ranges $(c/2t_{s2...n})+r_a;c/(2t_{s2...n})+r_{b)}$.

14. (New) The radar system as recited in Claim 9, wherein a self-echo signal and (n-1) cross echo signals are evaluated at least one of simultaneously and sequentially in a radar sensor when simultaneous evaluation of a plurality of receivers is provided.